

**REMARKS**

This Response to the Final Office Action is being submitted in response to the Final Office Action mailed April 6, 2009. Claims 1-30 are pending in the Application, of which claims 1-10 have been previously cancelled (See "Third Substitute Preliminary Amendment" dated February 7, 2008).

The Examiner has objected to the specification for failing to provide proper antecedent basis for the claimed subject matter. Specifically, the Examiner has stated there is no mention in the specification of a polymer concentration of "more than 30 % by weight." Claims 11-30 are rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. The Examiner has further objected to the phrase "a vinyl content in the range of from about 8 to about 23 mole %." The Examiner states the specification only discloses a vinyl content between 8 to 25 mole% and Applicant "cannot pick out any number they desire from a previously disclosed range."

Claims 11-30 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Hansen (U.S. Pat. No. 4,405,680), Grube et al (U.S. Pat. No. 5,055,135), or Ohtsuka et al (U.S. Pat. No. 5,925,695) in view of Schoenke (U.S. Pat. No. 4,032,491), Buck et al (U.S. Pat. No. 4,530,652), Kalkanoglu (U.S. Pat. No. 5,437,923), Fensel et al (U.S. Pat. No. 6,524, 980), Driesken et al (U.S. Pat. No. 6,538,053) or Stephens et al (U.S. Pub. No. 2003/0149140).

**REJECTION OF CLAIMS UNDER 35 U.S.C. §112**

Claims 11-30 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Specifically, the Examiner has stated there is no mention in the specification of a polymer concentration of "more than 30% by weight." Applicant respectfully disagrees with the Examiner.

In Applicant's previous Response to the Non-Final Office Action filed on February 24, 2009, Applicant cited *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (C.C.P.A. 1976) in support of their position. The issue in *In re Wertheim* dealt with whether the Applicant could claim priority from an earlier-filed foreign application. The invention related to a drying method for producing freeze dried coffee. The application claimed a process in which a coffee extract was prepared by the percolation of hot water through ground coffee beans, and the extract was concentrated to have a solid content between 35 percent and 60 percent. The Examiner refused to provide the Applicant priority, because the earlier-filed foreign application included a range of 25 to 60 percent and the Examiner claimed the earlier-filed foreign application did not contain an adequate description of the range as claimed in the Applicant's application.

On Appeal, the CCPA reversed the rejection of the Examiner. The CCPA held that the range of between 35 and 60 percent was adequately supported in the earlier-filed foreign application, and therefore, was patentable. In fact, the CCPA stated "in light of the description of the invention as employing solids content within the range of 25-60%..., we are of the opinion that, as a factual matter, persons skilled in the art would consider processes employing a 35-60% solids content range to be part of appellants' invention and would be led by the [earlier filed foreign application] so to conclude."

In the present case, the specification, as amended by Applicants in their October 29, 2008 Response, specifically states a range of "more than 20 wt% to 50 wt%." However, the Examiner has rejected the present application under § 112 because the Claims contain a limitation of "from more than 30 to 50 wt%." The Examiner has attempted to distinguish *In re Wertheim* from the present situation by pointing out that *In re Wertheim* provided an example of the solids within the amended claimed range. It is respectfully submitted that the Examiner's position is not supported by *In re Wertheim*. In fact, the Examiner is taking a position contrary to *In re Wertheim* and contrary to the patent laws. Essentially, the Examiner is requiring that Examples must be provided for each incremental step within a range, which is clearly contrary to the scope and breadth of the United States Patent Laws.

The primary function of the description requirement is to ensure the possession of the specific subject matter claimed. The way the specification accomplishes this is not material. *In re Smith*, 481 F.2d 910, 178 USPQ 620 (CCPA 1973). It is not necessary that the application describe the claim limitations exactly. *In re Lukach*, 442 F.2d 967, 169 USPQ 795 (1971). The description must be written so that persons of ordinary skill in the art will recognize from the disclosure that the composition was invented, including the limitations. *In re Smythe*, 480 F.2d 1376, 1382, 178 USPQ 279, 284 (CCPA 1973). Clearly, the applicant adequately described the 30 to 50 wt % limitation in the specification so that a person of ordinary skill in the art would recognize from the disclosure that the composition was invented.

The Court in *In re Wertheim* clearly stated “[i]nventions are constantly made which turn out not to be patentable, and applicants frequently discover during the course of prosecution that only a part of what they invented and originally claimed is patentable. To rule otherwise would let form triumph over substance, substantially eliminating the right of an applicant to retreat to an otherwise patentable species merely because he erroneously thought he was first with the genus when filed.” *In re Wertheim*, 541 F.2d 257, 263, 191 USPQ 90 (CCPA 1976). The Examiner has taken a position contrary to the Court by stating “[a]pplicants cannot pick out any number they desire from a previously disclosed range.” Additionally, it is uncontroverted that 35 USC § 112 does not prohibit an applicant from changing what he regards as his invention during the pendency of the application. However, the Examiner is doing just that- preventing Applicant from amending the application to claim a range of vinyl content narrower than the range originally set forth within the description.

The Examiner has also cited as the basis for rejecting the amendments that the ranges as presently claimed were not disclosed in an Example. This is contrary to the requirements placed upon an applicant under the United States Patent Laws. Applicant is not required to show an example containing every step within a range. As the Examiner is well aware, Applicant is only required to teach a person of ordinary skill in the art the process of producing the composition. Clearly, Applicant has satisfied this requirement.

The similarities in *In re Wertheim* and the present application are striking and require an identical result. First, the claims of the present application contain a range narrower than that disclosed in the present application's specification. Second, the range claimed within the present application is within the range stated in the specification. Third, a person skilled in the art would consider the range claimed in the present invention to be part of the invention disclosed in the provisional application. Therefore, by simple application and incorporation of the *In re Wertheim* opinion to the facts of the present case, one must conclude that claims of the present application are explicitly present in the specification of the present application.

**REJECTION OF CLAIMS 11-30 UNDER 35 U.S.C. §103(a) AS BEING UNPATENTABLE OVER HANSEN (U.S. PAT. NO. 4,405,680), GRUBE ET AL (U.S. PAT. NO. 5,055,135), OR OHTSUKA ET AL (U.S. PAT. NO. 5,925,695) IN VIEW OF SCHOENKE (U.S. PAT. NO. 4,032,491), BUCK ET AL (U.S. PAT. NO. 4,530,652), KALKANOGLU (U.S. PAT. NO. 5,437,923), FENSEL ET AL (U.S. PAT. NO. 6,524, 980), DRIESKEN ET AL (U.S. PAT. NO. 6,538,053) OR STEPHENS ET AL (U.S. PUB. NO. 2003/0149140)**

Claims 11-30 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Hansen (U.S. Pat. No. 4,405,680), Grube et al (U.S. Pat. No. 5,055,135), or Ohtsuka et al (U.S. Pat. No. 5,925,695) in view of Schoenke (U.S. Pat. No. 4,032,491), Buck et al (U.S. Pat. No. 4,530,652), Kalkanoglu (U.S. Pat. No. 5,437,923), Fensel et al (U.S. Pat. No. 6,524, 980), Driesken et al (U.S. Pat. No. 6,538,053) or Stephens et al (U.S. Pub. No. 2003/0149140). It is respectfully submitted, however, that the cited references fail to anticipate or render obvious the disclosed invention. Specifically, the cited references fail to disclose, suggest, or teach a thin block copolymer modified bituminous felt or pavement including a vinyl content in the range of from about 8 to about 23 mole % for selectively hydrogenated block copolymers.

Schoenke discloses a roofing composition and resulting product that comprises 5-40% of asphalt and 60-95% of a block copolymer.

Hansen discloses a roofing shingle composed of a block copolymer and asphalt composition, wherein the block copolymer is about 6 to about 30 wt% of the block copolymer.

Buck et al disclose an asphalt composition. The asphalt composition comprises an asphalt and about 10 to about 25 wt% of the block copolymer. The vinyl content of the block copolymer is at least about 25 percent, preferably in the range of 25-50 percent.

Grube et al disclose a flame retardant bitumen. The bitumen includes a styrene copolymer between about 2 and about 20 wt%.

Kalkanoglu discloses a halogen-free flame-retardant bitumen roofing composition. The styrene copolymers in the composition are in a concentration of about 2 to about 25 wt% based upon the total weight of the composition.

Ohtsuka et al disclose a curable composition, a cured article therefrom having improved properties, an asphalt emulsion, an asphalt mixture for paving, and a cured article prepared therefrom having excellent water permeability. The composition in Ohtsuka is limited to an aromatic vinyl compound.

Fensel et al disclose a roofing membrane using composite reinforcement constructions. The roofing membrane includes an SBS block copolymer in the range of about 5 to about 22 wt%.

Drieskens et al disclose a watertight roofing panel of a bituminous composition. The composition contains 5 to 25 wt% of rubbery polymers comprising at least (a) radial styrene-butadiene block copolymer, (b) linear and/or radial styrene-isoprene block copolymer, and (c) styrene-diene diblock copolymer, preferably of statistical interlinking.

Stephens et al disclose a polymer modified bitumen compositions. The polymer modifier is present in the bituminous composition in an amount in the range of from 0.5 to

25% by weight. Stephens et al further discloses a vinyl content of 30 to about 70 mol % for selectively hydrogenated block copolymers.

On the other hand, Claims 11 and 24 of the disclosed invention claim at least one block copolymer, comprising at least two poly(vinyl aromatic) blocks and at least one poly(conjugated diene) block having a vinyl content in the range of from about 8 to about 23 mol %. The poly(conjugated diene) of the present invention is selectively hydrogenated.

As the Examiner has pointed out, Stephens et al disclose a vinyl content between the range of about 20 to about 80 mol %, but these numbers do not represent the mol % for selectively hydrogenated poly(conjugated diene). Instead, Stephens et al specifically discloses a mol % from about 30 to 70 for selectively hydrogenated block copolymers (§ 38). This is outside the range of about 8 to about 23 mol % as disclosed in the present invention.

Additionally, Schoenke, Hansen, Buck et al, Grube et al, Kalkanoglu, Fensel et al, Drieskens et al, and Ohtsuka do not disclose, suggest, or teach a block copolymer including a vinyl content for selectively hydrogenated poly(conjugated diene) in the range of from about 8 to about 23 mole %.

These rejections are respectfully traversed, and reconsideration and withdrawal of the rejections are respectfully requested.

**CONCLUSION**

Applicant would like to thank Examiner for the attention and consideration accorded the present Application. Should Examiner determine that any further action is necessary to place the Application in condition for allowance, Examiner is encouraged to contact undersigned Counsel at the telephone number, facsimile number, address, or email address provided below. It is not believed that any fees for additional claims, extensions of time or the like are required beyond those that may otherwise be indicated in the documents accompanying this paper. However, if such additional fees are required, Examiner is encouraged to notify undersigned Counsel at Examiner's earliest convenience.

Respectfully submitted,

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